

LISTING OF THE CLAIMS AS AMENDED

Please amend claims 1, 2, 21 and 23 as follows:

1. (currently amended) A composition for detecting β -1,3-glucan exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions, prepared by the method comprising:

(i) collecting a sample comprising a mixture of plasma and hemocyte lysate from an insect;

(ii) treating said sample with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions ~~existing~~ present in said sample and during a ~~present separation~~ chromatography process to obtain fractions therefrom; and

(iii) selecting fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions from the obtained fractions.

2. (currently amended) A composition for detecting β -1,3-glucan according to claim 1 wherein the composition detects β -1,3-glucan concentrations as low as the minimum down to 20 pg/ml in the presence of calcium ions.

3. (withdrawn) A method of preparing a phenoloxidase composition activated by β -1,3-glucan in the presence of calcium ions, comprising: collecting a sample comprising a mixture of plasma and hemocyte lysate from an insect; treating said sample with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions {W:\06181\000J707US0\00105201.DOC *06181000J707US0* }

existing in said sample and during a separation process to obtain fractions therefrom; and selecting fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions from the obtained fractions.

4. (withdrawn) The method according to claim 3 wherein said insect belongs to Coleoptera.

5. (withdrawn) The method according to claim 4 wherein said Coleoptera belongs to Tenebrionidae or Scarabaeidae.

6. (withdrawn) The method according to claim 3 wherein said fractions are obtained by column chromatography.

7. (withdrawn) The method according to claim 6 wherein the column used for said column chromatography is packed with a resin comprising dextran or vinyl.

8. (withdrawn) The method according to claim 3, wherein whole or partially purified hemocyte lysate is further added to the fractions exhibiting the phenoloxidase activity by β -1,3-glucan in the presence of calcium ions.

9. (withdrawn) A method of preparing a phenoloxidase composition activated by β -1,3-glucan in the presence of calcium ions, comprising: treating insect plasma with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions existing in said plasma and during a separation process to obtain fractions therefrom; adding hemocyte lysate or partially purified hemocyte lysate to said fractions; and selecting fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions.

10. (withdrawn) The method according to claim 9 wherein said insect belongs to Coleoptera.

11. (withdrawn) The method according to claim 10 wherein said Coleoptera belongs to Tenebrionidae or Scarabaeidae.

12. (withdrawn) The method according to claim 9 wherein the said fractions are obtained by column chromatography.

13. (withdrawn) The method according to claim 12 wherein the column used for said column chromatography is packed with a resin comprising dextran or vinyl.

14. (withdrawn) The method according to claim 9, wherein whole or partially purified hemocyte lysate is further added to the fractions exhibiting the phenoloxidase activity by β -1,3-glucan in the presence of calcium ions.

15. (withdrawn) A method of detecting β -1,3-glucan comprising the steps of: collecting a sample from a specimen; adding a composition of claim 1 and calcium ions to said sample; and measuring the phenoloxidase activity in the sample.

16. (withdrawn) A diagnostic kit for detecting β -1,3-glucan which contains the composition detecting β -1,3-glucan the minimum down to 20 pg/ml in the presence of calcium ions.

17. (withdrawn) A diagnostic kit for detecting β -1,3-glucan exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions, prepared by the method comprising: collecting a sample comprising a mixture of plasma and hemocyte lysate from an insect; treating said sample with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions existing in said sample and during a separation process to obtain fractions therefrom; and selecting fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions from the obtained fractions.

18. (withdrawn) The diagnostic kit according to claim 17 wherein said insect belongs to Coleoptera.

19. (withdrawn) A diagnostic kit for detecting β -1,3-glucan exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions, prepared by the method comprising: treating insect plasma with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions existing in the plasma and during a separation process to obtain fractions; adding hemocyte lysate or partially purified hemocyte lysate to the above obtained fractions; and selecting fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions.

20. (withdrawn) The diagnostic kit according to claim 19 wherein the insect belongs to Coleoptera.

21. (currently amended) A composition for detecting β -1,3-glucan exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions, said composition prepared by ~~the method comprising~~:

(i) treating insect plasma with a solvent or buffer solution containing a sufficient amount of a chelating agent to chelate calcium ions ~~existing~~ present in the plasma and

(ii) ~~during~~ separating said chelated plasma by a separation chromatography process to obtain fractions from said chelated plasma therefrom;

(iii) adding hemocyte lysate or partially purified hemocyte lysate to said fractions to form lysate treated fractions; and

(iv) selecting lysate treated fractions exhibiting phenoloxidase activity by β -1,3-glucan in the presence of calcium ions.

22. (withdrawn) A method of detecting β -1,3-glucan comprising the steps of: collecting a sample from a specimen; adding a composition of claim 21 and calcium ions to said sample; and measuring the phenoloxidase activity in the sample.

23. (currently amended) The composition according to claim 2 wherein said composition is ~~characterized in measuring the~~ has phenoloxidase activity.

24. (withdrawn) The diagnostic kit according to claim 16 wherein said diagnostic kit is characterized in measuring the phenoloxidase activity.

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